



FEDERAL AVIATION ADMINISTRATION
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April 15th, 2002

From: Dr. William K. Krebs, (AAR-100), Aviation Maintenance Human Factors
Program Manager
To: Les Vipond (AFS-300)

Subj: Using Technology to Support Inspector Training Execution Plan

Ref: (a) Airworthiness TCRG March 5-6, 2002 meeting minutes
(b) Aviation maintenance requirement entitled "Using Technology to Support
Inspection Training: In General Aviation, Corporate, and Regional"

- 1) Per reference (a), the Airworthiness TCRG ranked the "Using Technology to Support Inspection Training: In General Aviation, Corporate, and Regional" (ref: b) number three as the FY02 aviation maintenance human factors priority. The requirement's objective is to "demonstrate how advanced technology can be used for inspection training and reducing errors for the general aviation industry."
- 2) The project will be executed as follows:

Phase I tasks:

- i. Comprehensive literature bibliography
- ii. Develop data collection instruments
- iii. Identify general aviation, regional, and corporate maintenance facilities located across the country to be used in the data collection
- iv. Conduct task analyses
- v. Defined milestones (if possible, milestones will be determined)
 - Note: a grantee is not responsible to adhere to defined milestones.
- vi. Quarterly (December, March, July, and September) research progress status reports
 - Informal e-mail reports from the AAR-100 aviation maintenance human factors program manager to Les Vipond (AFS-300)

- vii. FY03 annual report summarizing year's activities by grantee. This annual report including other human factors aviation maintenance projects sponsored by AFS-300 will be electronically submitted to AFS-300.
 - Grantee will submit an annual report using AAR-100's Productivity Report website (<http://www.hf.faa.gov/report/>) to the AAR-100 aviation maintenance human factors program manager.

Phase II tasks:

- i. Data reduction and analyses
- ii. Develop training materials
- iii. Defined milestones (if possible, milestones will be determined)
 - Note: a grantee is not responsible to adhere to defined milestones.
- iv. Quarterly (December, March, July, and September) research progress status reports
 - informal e-mail reports from the program manager aviation maintenance human factors to Les Vipond
- v. FY04 annual report summarizing year's activities by grantee. This annual report including other human factors aviation maintenance projects sponsored by AFS-300 will be electronically submitted to AFS-300.
 - Grantee will submit an annual report to the AAR-100 aviation maintenance human factors program manager using AAR-100's Productivity Report website (<http://www.hf.faa.gov/report/>)

Phase III tasks:

- i. Develop and complete training prototype system
 - Software, GUI, scripts
- ii. Defined milestones (if possible, milestones will be determined)
 - Note: a grantee is not responsible to adhere to defined milestones.
- iii. Quarterly (December, March, July, and September) research progress status reports
 - informal e-mail reports from the program manager aviation maintenance human factors to Les Vipond
- iv. FY05 annual report summarizing year's activities by grantee. This annual report including other human factors aviation maintenance projects sponsored by AFS-300 will be electronically submitted to AFS-300.

- Grantee will submit an annual report to the AAR-100 aviation maintenance human factors program manager using AAR-100's Productivity Report website (<http://www.hf.faa.gov/report/>)

Deliverables:

- i. Final report containing
 - This research will provide the general aviation industry with a benchmark for inspector training.
 - Evaluation and validation studies will be delivered that focus on the impact of inspector training programs in minimizing inspector errors and standardizing the inspection training process.
- ii. Final Report formatted to permit development of appropriate guidance material by AFS-300
 - AFS-300 is responsible in submitting defined format to the program manager for aviation maintenance human factors by January 2005.

Schedule:

Phase I Tasks: FY02/FY03
Phase II Tasks: FY04
Phase III Tasks: FY05
Final Report: FY05 (September 2005)